DOCUMENT RESUME

ED 052 307 VT 012 120

AUTHOR	Manning, William; Stansbury, Eunice
TITLE	Promoting Civil Service Employment of the Deaf. Final Report.
INSTITUTION	District of Columbia Dept. of Vocational Rehabilitation, Washington D.C.
SPONS AGENCY	Social and Rehabilitation Service (DHEW), Washington, D.C.
PUB DATE	31 Oct 69
NOTE	49p.
EDRS PRICE	EDRS Price MF-$0.65 HC-$3.29
DESCRIPTORS	Adult Education, *Deaf, *Employment Opportunities, *Government Employees, Group Counseling, Job Placement, *Rehabilitation Programs, Sensitivity Training, *Vocational Rehabilitation

ABSTRACT

The purpose of this project was to investigate some of the difficulties the deaf have in obtaining employment, and to implement techniques to overcome some of these barriers, particularly in Civil Service. Different services were provided to each of five groups of clients, including training in computer operations, language skill training, counseling on the availability of psychological services, job placement through counselor referrals, and training for Post Office examinations. In each group, interpreter services were offered as an ancillary service, since some employers were more willing to hire a deaf employee if an interpreter was available for the orientation period. Three similar training programs in Baltimore, Detroit, and Washington, D.C., revealed apparent disparity in results, and a followup study was made of the three populations. (BH)

W-R-8
33

PROMOTING CIVIL SERVICE EMPLOYMENT OF THE DEAF

ED052307

Grant No. RD 2266-S
Social and Rehabilitation Service
Department of Health, Education, and Welfare

CONDUCTED BY

The Department of Vocational Rehabilitation
Government of the District of Columbia
Washington, D.C. 20005

October 31, 1969

FINAL REPORT

VT012120

1

ED052307

Promoting Civil Service Employment of the Deaf

FINAL REPORT

AUTHORS:

William Manning
Eunice Stansbury

EDITOR

Richard Sheppard

PROJECT DIRECTOR

E. Paul Benoit, Ph.D. (August, 1966 to January, 1969)
Kay T. Intrator (January 1969 to October, 1969)

CONDUCTED BY

The Department of Vocational Rehabilitation
Government of the District of Columbia
Washington, D.C. 20005
Norman W. Pierson, Director

October 31, 1969

This investigation was supported, in part, by Research Grant No. RD 2266-S from the Division of Research and Demonstration Grants, Social and Rehabilitation Service, Department of Health, Education, and Welfare, Washington, D.C. 20001.

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

BRIEF

The purpose of this project was to investigate some of the difficulties the deaf have in obtaining employment, and to implement techniques to overcome some of these barriers, particularly in Civil Service.

Five populations were served. The first group consisted of 18 clients interested in obtaining employment in computer operations. The second group was set up to improve language skills. The third group was established to provide information concerning psychological services generally available to hearing people. A fourth group received placement services based upon counselor referrals. A fifth group was trained for taking the Post Office Clerk-Carrier Examination. Finally, in each of the groups mentioned above, interpreter services were offered in some cases, as an ancillary service.

The 18 clients who received training in computer operations were trained through a cooperative effort with rehabilitation agencies in several other states. Arrangements were made in the District of Columbia with a training agency to teach computer operation to a group of deaf clients. Since there was an insufficient number of potential participants known in D.C., other states were contacted and asked to recommend clients for this training. Upon completion of the training, the clients returned to their home states.

Most of these clients were recent graduates from high school, with little or no work experience. They were given sensitivity training in an effort to make them more self-aware and to help them appraise themselves more realistically. Many helpful insights were obtained by members of the group.

Adult education classes were offered for those persons who were already employed but needed help with language skills, in order to enhance their employment opportunity. There were courses in typing, drama, and English. The English class was divided into two parts, a combination of remedial grammar and literature made up one part and instruction in vocational language made up the other. Out of the latter evolved a training for the Post Office Clerk-Carrier Examination. Of the 36 people involved in the program in D.C., 13 passed the test. A similar training program was conducted in Baltimore and Detroit. Because of an apparent disparity in results between these jurisdictions, a follow-up study was made of the three populations.

An important part of the services offered was that of providing interpreters. Some employers were more willing to hire a deaf employee if they knew an interpreter would be made available during the orientation period.

TABLE OF CONTENTS

Chapter		Page
	Acknowledgments	i
I.	Introduction	1
II.	Adult Education	3
III.	Psychological Services	6
IV.	Post Office Follow-up Study	11
V.	Placement Services	26
VI.	Workshop on Interpreter Service	30
VII.	Summary	32
	Bibliography	33
	Appendix A - Post meeting evaluation	35
	Appendix B -An investigation of deaf persons taking the Civil Service Post Office Clerk-Carrier Examination-questionnaire	41
	Appendix C - Sample of responses to selected questionnaire items distributed to geographic areas	42

ACKNOWLEDGEMENT

The staff wishes to express sincere thanks for their interest and assistance to:

Deaf persons participating in the project–for their suggestions, help and cooperation;

Members of the District of Columbia Department of Education, and especially the Department of Adult Education, who were most helpful and enthusiastic in working with us to inaugurate the adult education program for the deaf;

Professional workers with the deaf including persons associated with Gallaudet College, school counselors, and vocational rehabilitation workers from the District of Columbia, Maryland, Virginia and Michigan;

Personnel workers in various government agencies especially coordinators for the employment of the handicapped and personnel workers in private industry;

Cooperating Post Office personnel and Vocational Rehabilitation State Agency Administrators in Michigan, Maryland and the District of Columbia;

And, others who have provided long hours of technical assistance.

CHAPTER I

INTRODUCTION

This project evolved out of difficulties encountered by the deaf in finding employment in the metropolitan area of the District of Columbia. Since the Federal Government is the major employer here, it was decided that it would be desirable to explore reasons the deaf had difficulty in obtaining federal employment and to study the various facets of the problem.

The population of the project consisted of hearing impaired persons in the District of Columbia metropolitan area.* The age of clients participating in project programs ranged from seventeen years of age to persons in their late fifties. However, the majority of the clients were between twenty and forty and had terminated their formal schooling. These were largely non-college trained persons, and many had not completed high school

Most of those served were persons with some employment experience who were interested in upgrading their skills in order to increase their opportunity for advancement in employment. Others were re-entering the job market after a period during which they had not been employed. These persons were primarily interested in updating their skills. Still others were desirous of changing career fields and were in search of retraining opportunities. The project staff worked with rehabilitation workers, educators, and other professionals concerned with the deaf to analyze the needs of project clients and to develop programs to meet these needs.

Needs and programs are reflected in the five following areas of project activity:

Adult Education

The first activity discussed in the report is adult education. Because of the difficulty of the deaf in developing verbal language and in communicating with the hearing population, programs to improve verbal and communication skills were seen to be of particular importance in promoting employment opportunities for the deaf.

Psychological Services

A second area of activity was that of providing psychological services to rehabilitation clients. Although psychological services are available to hearing persons in this community, they are frequently unavailable to the deaf because

of the communication problem. Sensitivity training and group counseling were offered in an attempt to aid clients to prepare for certain areas of employment and to assist them when confronting job or training difficulties. Vocational and psychological evaluations were made to aid clients in determining their work goals.

Post Office Test and Follow Up Study

Due to the fact that written employment examinations unfairly discriminate against the deaf, special efforts were made to reduce such bias with the Civil Service examination for the position of post office clerk-carrier. The Post Office eliminated a vocabulary portion of the test. Later, it was agreed that test instructions could be "signed" and a pre-test training course was developed. Similiar programs were conducted in Baltimore and Detroit. Since there was a notable difference in test results between these areas, it was decided that a comparative follow-up study of the populations tested was desirable.

Interpreter Services

Another activity involved the provision of interpreter services to the deaf. The need for interpreter services was apparent in all areas of project activity. This need was so great that a workshop was conducted concerning the overall need of interpreter services in the rehabilitation of the deaf. It was also the purpose of this workshop to develop guidelines to insure the proper use of this important service.

Placement in Employment

The final portion of this report relates to the problem of placing the deaf in employment. The process of acquiring a job relies heavily on verbal and written communication from the study of a job description through job adjustment. Satisfactory job placement is dependent upon satisfactory communication between client and employer. Procedures designed to diminish communication barriers to obtaining and holding employment, particularly in the federal government, are described.

*The Post Office Study included persons from Baltimore, Maryland and Detroit, Michigan.

CHAPTER II

ADULT EDUCATION

Since most of the project population consisted of employed deaf persons who were interested in upgrading their employment or going into a job where there was a greater opportunity for advancement or better job satisfaction, training designed to improve skills or provide new ones became a most important project service. However, many deaf clients first needed a varied remedial education program before they could benefit from pre-vocational or vocational training that would open the doors to Federal employment.

The need for remedial education was apparent for the following reasons. First, the average deaf person has not devloped the same degree of written or verbal language as his hearing peer by the time his secondary education is terminated. Adult education classes in language development offered the deaf an opportunity to improve skills in this area after the completion of regular schooling.

Many educational facilities for the deaf are residential and the deaf student does not have the same exposure to vocational information that the hearing person learns informally from his family and the community. Nor does he derive the same degree of occupational information from public communications media such as t.v., radio, or newspapers as does the hearing individual. Also, the deaf are deprived of many early vocational experiences of hearing youngsters such as newspaper routes and other afterschool and summer employment opportunities.

After school, the employed deaf person is unable to obtain much of the information about his own work world that is readily available to the hearing person via informal conversations and routine in-service training. The deaf person is frequently trained to work in skilled and semi-skilled areas at the entry level and continued language training may be required to enable him to keep his qualifications timely. Adult education offered an opportunity to close these gaps.

After the need for an adult education program was identified project staff worked in cooperation with the Adult Education Division of the District of Columbia Department of Education in planning and inaugurating a program. It was hoped that initial classes might be established in language development, social science, typing and business math. We were advised that classes for the

deaf would be inaugurated when proper evidence supporting interest in such courses was furnished. By utilizing questionnaires and periodicals popular among the local deaf, interest in adult education was ascertained.

Since members of our staff were able to judge the signing ability of teachers, the Division of Adult Education advised us of the necessary requirements for certification by the D.C. Board of Education and requested us to recruit teachers. As a result of our combined efforts eight teachers were certified.

Interest in two areas (English and typing) was demonstrated in sufficient numbers to enable classes in these subjects to begin in the spring of 1967. Classes continued in these subjects in the fall of 1967 and spring of 1968. Another class, less vocationally significant, in drama was started in the spring of 1968 due to the expressed interest of those participating in the adult education program.

Classes were held at a local high school on two nights a week (Monday and Wednesday) from 7 to 9:30 p.m. Each class was composed of 14[1] members.

During the first semester in which classes were offered (spring 1967) much time was spent in the language class in attempting to identify functioning language level of members of the class. Because the range of background in this area was so varied, the class was divided into two sections during the second semester. Each section spent half time in independent work while the other half was involved in more formal class procedure. In the spring of 1968, the class was also divided into two sections and one became a vocational language course which focused on language needed in the job situation. Special job related reading and writing material was used in this course.

Teachers of both the typing and the language class felt that class size was unreasonable for a deaf group. The typing class was offered for two semesters and the teacher tried to overcome the limitations imposed by class size by individualizing instruction as much as possible. This procedure, though not ideal, appeared to work out satisfactorily for that class. In the language class, however, the size of the class became a very serious problem and was thought by the teacher to have negatively affected the motivation of the students and class attendance.

The section of the English class which concentrated on vocational

[1]This represents class size for Spring 1967. Class size varied from 13 to 16 in subsequent classes.

language became the nucleus of one of the test training courses for the post office clerk-carrier examination. Members of this class appeared interested in programs directly related to employment opportunities. The adult education program is considered to have played a positive role in opening employment opportunities for some participants in this program. Classes in preparation for the post office examination were taken over by staff members from the Unit for the Communications Impaired from this agency and continue to be offered periodically.

The other classes in adult education are more difficult to evaluate. They were less directly related to employment opportunities. Teachers of these classes were critical of class size especially since age range and background differences were so great among participants.

Observations and Recommendations

Care should be taken to group classes not only by interest in particular subject areas but by level of achievement in that subject. This is especially necessary in language courses. In order to group by level of language achievement, much class time was spent in testing and evaluative procedures. More satisfactory grouping would probably be made possible by obtaining background information on the students from their former schools.

All attempts should be made to keep classes at a managable size (no more than six students in our experience) for this specific disability group. It was found that when a group became too large there was a tendency for the time to be used for socializing during periods supposedly marked for independent study.

It was the teacher's recommendation that the vocational language course would be more significant to younger deaf persons such as students about to leave high school or to young deaf having just entered employment.

CHAPTER III

PSYCHOLOGICAL SERVICES

Members of the staff in the Unit for the Communications Impaired, became increasingly aware that many of the people who are deaf in the District of Columbia needed mental health services. This awareness came from several sources. Some clients were not employable because of work adjustment, social, or emotional problems. Often clients were placed on jobs and remained only a short time because of poor work habits such as tardiness and not reporting in when unable to come to work. A few of the clients who were referred to DVR from the local mental hospital were advised to obtain psychiatric services on an outpatient basis. However, the outpatient facilities are equipped to handle hearing people and are reluctant to work with the deaf. Many of the more sophisticated members of the deaf community asked to be referred for specific services such as marriage and family counseling, but few services are available for the deaf.

We carefully reviewed psychological service resources in the District of Columbia to determine the extent of service gaps for the deaf. Several things were done by project staff to obtain this information: (1) a review was made of a survey conducted in 1961 at Gallaudet College of the social service agencies that might serve the deaf, (2) a survey was made of the D.C. mental health agencies to determine their willingness to serve the deaf, (3) contacts were made with rehabilitation agencies around the country having special units for the deaf, (4) a class was offered in mental health to a group of deaf persons for the purpose of making them aware of the types of services available and how they are utilized, and (5) finally, to get information and provide a service, sensitivity training was offered to clients in a special training program sponsored by our department. Each of these activities will be discussed below.

The existing social service agencies and/or mental health facilities are for evaluation, medical and allied treatment, job preparation, recreation, education, welfare, family and child services and legal aid. The agencies provide such services as counseling, casework, training, diagnosis and treatment.

Most of these facilities handle problems of hearing people. A study conducted at Gallaudet College in 1961 indicated that out of 234 social service agencies in the Metropolitan Washington, D.C. area, only 73 made any claim to having served a person who was deaf during that year. At that time 8 of these agencies indicated that they had a person on their staff who could communicate

manually. One other agency said it would provide services if an interpreter could be made available.

A subsequent survey conducted in 1967 by a member of the project staff indicated that of the eight agencies mentioned above, four were directed out of Kendall School, (the local public school for the deaf) and Gallaudet College. Personal interviews with the directors of an additional twelve mental health agencies indicatd that only two of these have had any dealing with deaf clients.[1] In one case, the nature of the service was recreational. The other agency dealt with adjustment problems by having joint consultations with deaf children and their hearing parents. Also one of the facilities available exclusively to Gallaudet students in 1961, no longer exists. These findings indicated that much needed to be done to provide mental health services for deaf people.

In order to establish an understanding of what could reasonably be done, each of the state rehabilitation agencies known to have programs or special units for the deaf were contacted. We requested information concerning the services available in their state for the deaf. Letters were sent to the individuals in charge of the special units–approximately 30 letters were sent and 18 agency representatives responded. Most of the rehabilitation agencies provided psychological or vocational evaluation and training. Each reply stated there is a great need for additional services.

Another attempt was made to gather information and at the same time provide a service to clients. A class in mental health was conducted at Gallaudet College by the project staff. Letters were sent to most of the clients listed in the Registry of the Deaf, compiled also by the project staff. To those persons expressing an interest in the class an announcement was sent indicating time and location.

The classes consisted of weekly 2 hour sessions for 16 weeks. The first five classes were a one hour lecture followed by an hour of informal discussion of problems encountered in everyday life. As a basis for their discussion, the members were asked to make a list of the day to day problems they face. It was felt that this would enable them to understand one phase of mental health service, namely group counseling.

At first the questions were very specific. They were usually about why other people behave as they do, with reference to a particular incident. Later, as the class progressed, the participants were able to discuss reasons for their own

behavior and the kinds of things about themselves they wanted to change or did not understand. Toward the end of the class the different kinds of mental health facilities available in the city were discussed and how they are presently being used.

One thing that received much attention in the group was the attitude of employers or other hearing co-workers. Most of the group felt that too much is expected of them with too little reward. Some others felt that many things are kept from them on the job, such as information about promotions and training positions available to other workers. Most of the group would not accept any personal responsibility for missing this type of information. Instead they accepted this as the plight of the deaf and resigned themselves to staying in the same jobs. These are some of the attitudes that the DC DVR counselors believe most deaf people have toward hearing people. It is felt that many deaf people need help with these problems prior to entry into employment.

For this reason a Sensitivity Training group was conducted at International Academy of Brentwood, Maryland for 18 deaf computer operations students. The group was divided into two sections to facilitate class activities. This proved mutually beneficial for group work and for class scheduling. While one half the class met for laboratory assignment, the other half attended sensitivity training.

Each group met one and a half hours per week for nine weeks. The average age of the members was 20 years.

At the first session, the goals of the group were explained and ground rules were set. The group proceeded rather stiffly from this point. To lessen the tension, name cards were distributed at the third meeting. Each person told his favorite "nickname". This seemed to give some momentum to the group sessions as each person got some positive and/or negative feedback about what the "nickname" suggested, to others of the group. From this point on it became easier for the group members to express negative as well as positive feelings toward each other. One aim was to allow each individual to see himself as others see him, and thus change the behavior he dislikes within himself. The group offered assistance whenever asked or were so moved.

Towards the end of the group meetings, many wanted to know if these sessions would continue beyond the training at International Academy. Some of the clients were just beginning to have meaningful experiences in the group as

the end approached, and they wanted to continue the sessions.

At the end of each session a form was given to the students so that they could evaluate their participation and give their reaction to the sessions. (See appendix A Post Meeting Evaluation) The first three weeks they reported that they did not express their feelings during the session but as the weeks passed they reported more and more that true feelings were being expressed and that after the meeting they felt better about themselves.

With few exceptions the members seemed to be more willing to accept responsibility for their own behavior. One person who was very reluctant to communicate in the group admitted that he felt ashamed to sign because his parents had always forbidden him to socialize with other deaf people who used sign language. Although he understood sign language and could use it well, everyone assumed he was unable to do so and assumed he did not like them. At the last session many commented that they were pleased with the relationship they were establishing with him. He reported that he was more willing to try to interact with persons from the group after this experience.

Another example of helpful interchange in the group, involved a person who dominated the group sessions. He was under the impression that everyone enjoyed the way he behaved. It was revealed that many thought he did not care about them, because he was so domineering and apparently unconcerned about their feelings. As a result they allowed him to continue his behavior because this was easier than getting involved with a person who really did not know how to extend or accept friendship.

After the eighth session, the usual form was given and with one exception each person reported that he was better able to express his true feelings and felt good about it. Further, each person seemed more willing to constructively criticize another's behavior in a frank and open manner, that was mature and ensightful, without joking and ridicule.

Recommendations

Workers from different disciplines should meet to determine the priorities for services in their locations, keeping in mind their own skills and what help they need in providing and continuing services to the deaf. In the establishment of interpreter services, it would be ideal for the interpreters to be trained to work in certain areas, i.e. counseling, thus developing a kind of

specialization within this service. Another suggestion is that rehabilitation agencies push for the hiring of specially trained personnel to handle mental health problems, i.e. social workers, psychologists, therapists, etc. A push should also be made to get colleges to offer a training program for those college students who might be interested in mental health type work and who would specialized in working with the deaf. In other words, there is a need to provide a continuing resource of persons available and qualified to work with the deaf.

[1]This statement represents the personal reflections of the agency directors obtained in a personal interview. All of the directors had been with their agency three years or less.

CHAPTER IV

AN INVESTIGATION OF DEAF PERSONS TAKING THE CIVIL SERVICE POST OFFICE CLERK-CARRIER EXAMINATION

A. Background Information

Persons born deaf or deafened during the early stages of language development have difficulty not only in the area of oral communication but also in the development of skill in written language. Because of this difficulty, at the time of school completion the average deaf person normally does not attain the same level of language sophistication as does his hearing peer. This fact has been observed by many experts in the training of the deaf and in the field of research with the deaf.(1)(2)(3) This language retardation is referred to by Firth(4) as "educational hump". He, thus, emphasizes the fact that at a given point of educational development the relationship between language and intelligence or ability to perform cannot be evaluated for deaf persons on the basis of norms established for hearing groups.

Written examinations are a much used screening tool for entry into employment with the Federal Civil Service. These are designed to measure: (1) Performance–a person's knowledge concerning particular job functions, and (2) General Information–this second part is designed to measure attainment in certain broad areas of knowledge which are used to estimate potential. The latter is usually a highly verbal sub-test. The norms used as the basis for prognostication are established on hearing groups. Because of its highly verbal nature, this part becomes an obstable for deaf persons when competing on an examination in which the score on this part is combined with scores on the performance sub-tests.

It was felt that some deaf persons who would perform competently on the job, were unable to obtain passing scores on the Clerk-Carrier Examination because of this sub-test (General Information). For this reason, the Civil Service Commission authorized the deletion of the General Information part of this test for persons with severe hearing impairment. The modified test includes measurement of skills used in actual job performance. It consists of two parts: Part I measures speed and accuracy in address checking; Part II measures a person's ability to follow instructions in routing and sorting mail.

In order to take all possible steps to equalize the opportunity of the deaf person to demonstrate his potential for Clerk-Carrier employment it was

considered necessary to administer the modified examination in a special testing situation. This was not a further test modification but introduced the use of sign language and fingerspelling in the administration of the examination. This enabled the participants to obtain clarification of directions. It was felt that this could not be accomplished by merely permitting deaf persons to read the printed instructions, because the instructions themselves were written at a level of verbal sophistication beyond the individual's level of comprehension and beyond that required for adequate job performance. It was also felt that the person interpreting for the examination should be familiar with the persons taking the examination and their language level. Thus, he (the interpreter) could gear the level of signs used to his audience and attempt to clarify any confusion.

Following these guidelines, a special testing situation for the Clerk-Carrier examination was held March 29, 1967. At this time the instructions were signed. Only one (1) of the fourteen (14) participants (7.1%) received a passing score. In discussions with participants and with the interpreter, it was concluded that the participants were generally unfamiliar with test procedures and thus some innovative procedures were necessary.

A test training program was organized at Gallaudet College for any deaf person who was interested in taking the Post Office Clerk-Carrier Examination. the class met for two and one half (2½) hours, once per week, for six weeks. It was based on the sample questions given to applicants for the Clerk-Carrier test furnished by the Civil Service Commission. The course provided a step by step explanation of the types of instructions and directions contained in the test items. Vocabulary, routing scheme and timed test exercises were provided during the class meeting. Discussions were held which dealt with the types of questions one might expect on a test, i.e., multiple choice, true-false, etc. The class as well as the formal testing instructions, were signed by a person who was versed in the language of signs and who knew the language level of the clients in the group. Two days after the last class meeting, the clients were given the Clerk-Carrier Examination. Though administered by examiners from the Post Office Department, the instructions were signed as they were read aloud. Sixteen persons participated in this testing.

Following this testing another training class was formed. Twenty-four persons participated; five of which had taken the prior test. A similar procedure was used as described above. The only exception was that this class was held for one hour per week for twelve weeks. The time was changed not for purpose of

study but because of the demands on the time of the clients.

A third training and testing was given and this one was exactly like the first. Twenty-three people participated, ten of which had been in previous testing.

During the period in which these specialized testing programs were conducted in the District of Columbia, similar test situations and test training programs were held in Baltimore, Maryland and Detroit, Michigan. In comparing test results of the program in D.C. and Baltimore, questions arose concerning the backgrounds of the populations involved. These questions concerned not only the degree of deafness and the age of onset of deafness but related to educational backgrounds, type of education received and place of education. For this reason it was felt a more critical analysis of personal, social and educational factors which may influence achievement was necessary.

B. Purpose of Study

The purpose of this study was to identify background variables which possibly influence a deaf person's chances for success in the Post Office Clerk-Carrier examination and similar tests. This information, it was thought, would be helpful in the planning and development of future test training programs and for vocational guidance offered to clients by rehabilitation counselors and others who work with the deaf. Since testing has become an increasingly important screening procedure for entrance into private and public employment, an identification of background factors influencing the probability of success in testing situations was thought to have some value.

In an investigation of the background information of persons in the study population, we attempt to answer the following questions:

1. Does the age of the client affect the test results?

2. Are there differences in the sexual and racial composition of the three groups?

3. Does a relationship exist between the number of years of education and the test results?

4. Is there any difference between the performance of persons educated in different regions of the U.S.?

5. Is there a difference between the educational level of the various groups in the study?

6. Does a relationship exist between the reading level and achievement on the test?

7. Was there a difference in reading level between the three groups in the study?

8. Does a relationship exist between the age of onset of deafness or degree of hearing loss and test results?

9. Were there significant differences between the three populations tested in degree of hearing loss?

10. Is there any difference in test performance of persons with relatives who are deaf as opposed to those who are the only member in the family who is deaf?

11. What secondary disabilities were prevalent within the three groups?

12. Was there any difference in the type of employment engaged in by those who passed versus those who failed the test?

13. Were three differences in the types of employment engaged in by particpants for the three cities of the study?

C. Methodology

A questionnaire was designed to obtain such information from the Vocational Rehabilitation Case Record. The questionnaire was designed by listing variables in deaf person's background which had been found, in other studies, to influence their performance in a competitive testing situation. This questionnaire was pre-tested to ascertain the availability and practicality of the information requested. The final form was a modified version of this questionnaire.

By reviewing case records maintained by the Communications Impaired Unit of the D.C. Department of Vocational Rehabilitation it was determined

that the information requested on the questionnaire was available. Based upon this and preliminary communications with the project directors of the training programs in the other two cities, it was assumed this same data could be obtained elsewhere.

The clients for the study were all tested in D.C., Baltimore, or Detroit following test training. They were persons who were considered severely hearing impaired by professional personnel working with the deaf in their respective localities. There were 160 persons involved in the study: 69 from Baltimore; 55 from Detroit; and 36 from the District of Columbia. Two members of the project staff visited the rehabilitation agencies in the other two cities to collect the data for the questionnaire and to interview the staff members who were responsible for referring the client to the special examination. It was felt that more complete data could be obtained by this procedure with the least amount of inconvenience to the personnel in the cooperating agencies. Also, the discussions with these people brought out some problems they encountered and the differences in procedure followed.

D. Results and Implication

Many of the results are presented in the form of data, descriptive of the populations studied. Questions were presented for study that received little or no attention in the report, due to the collection of incomplete data. It was assumed at the outset that the information requested on the questionnaire was available in all case folders, but much of it was missing in each of the cities. .

During the time covered by this study, 197 clients took the special examinations. However, our study included only 160 of that total figure, as some participants were not active clients with the agencies involved. Of these, 36 were tested in the District of Columbia, 69 in Baltimore, and 55 in Detroit. The study sample included only those persons whose case records were available at the rehabilitation agencies in these three cities. The following is a presentation of the data analysis:

Age: Did the age of client affect the test results?

The clients ranged in age from 19 to 60. Approximately 36 percent were over 39 years of age, and approximately 11 percent were more than 50 years old. See Table I. The average age of the sample was 33.71 years. (This figure was computed on the actual ages and not using the formula for class

intervals, thus accounting for the difference which would occur between a mean obtained using Table I.)

The first passed-failed analysis involved the age of clients at the time of testing. The older persons tended to be among those who failed. The means for the total group were not significantly different, though they were in the right direction, i.e., the older persons tended to fail. In Baltimore, however, the group that passed was significantly younger than those who failed ($t=2.90$, $p>.01$) suggesting that age might be a critical factor for successful performance. See Table II. This was also true for D.C. ($t=2.08$, $p>.05$). While it only approached significance in Detroit, a similar trend was noted.

Sex and Race: Were there differences in the sexual and racial composition of the three groups?

The sample was composed of 49 males and 111 females. See Table III.

Although each of the cities had a larger number of females than males taking the exam, in Detroit 44, or 80 percent of the participants were female. In the District of Columbia and Baltimore, over 60 percent of the participants were female.

Considering the passed-failed ratio for the total group, we found that about the same number of women passed and failed (See Table IV. In each city, the proportion of women passing was greater than the men, with the exception of the District of Columbia, here the opposite was true. More males passed than females, although a greater number of females took the test. Perhaps this is a chance factor which is due to the size of the sample.

The clients were identified as white or non-white. Of the 160 participants, 112 were white. No information was available on the race of four of the clients. See Table V.

In the group from the District of Columbia, the percentage of non-white clients was higher than white. The opposite is true for both the Baltimore and the Detroit groups. See Table V. This may be indicative of the racial composition of the client case load in each of the three cities.

Of the white persons in all areas who took the examination, 69, or 61.60 percent passed, as opposed to 29.54 percent of the non- white. See Table VI. A similar trend is noted in each of the three cities in our sample.

High School Status: Did a relationship exist between the amount of education of the clients and their test results? Is there a difference between the performance of persons educated in different regions of the United States?

We were interested in determining if any of the differences in test performance could be accounted for by a breakdown of high school status. Better than 50 percent of the clients had graduated from high school. See Table VII. In keeping with this, 12.01 years represented the average years of schooling for the group. The average years of schooling for the participants in the three cities was 12.10 for the District of Columbia, 11.41 for Baltimore, and 12.87 years for Detroit. No information on high school status was available for 30 percent of the clients.

A passed-graduated versus passed-not-graduated and a failed-graduated verses a failed-not-graduated comparison was made. In each case, those who graduated scored significantly higher than those who had not completed high school. See Table VIII. The passed-and failed-graduated groups scored significantly higher than the passed-and failed-not graduated groups (p .05 and p .01 respectively). The scores were not influenced by people who had college training, as the highest scorers had no college training at the time of the test. The study included approximately 10 people with some years in college, ranging from 1 to 6 years.

No attempt was made to statistically compare the means for each city on this breakdown because the sizes of the samples were too small. Upon inspection, scores for the District of Columbia and Baltimore groups appeared lowest for the not graduated groups. In Detroit, however, there seemed to be less gap between the scores in these two groups (graduated vs. not graduated) when looking only at the passed scores. For those who failed in Detroit, the difference seemed greater in favor of the graduated group.

A regional comparison was not possible, as most of the participants were educated in the area where they took the test. We had believed originally that the differences observed in test results might have been due to an inmigration of persons to these urban centers. The study did not reflect this assumption.

Reading Level and Years in School: Did a relationship exist between reading level and achievement on the test? Was there a difference in reading level between

the three groups?

The clients had an average reading level of sixth grade. Although the means were not significant, the passed group tended to have a higher reading level than the group that failed. See Table IX. This may suggest that in spite of attempts to make the examination less verbal and more in line with actual duties on the job, a certain verbal level is necessary to pass the test. However, more needs to be done with this variable in future studies.

No comparison between cities was made because there was not enough data available on reading level in each of the three cities.

Degree of Hearing Loss and Age of Onset of Deafness: Did a relationship exist between the degree of hearing loss, age of onset of deafness, and success on the test?

All clients who took the examination had severe hearing impairments. Most of them (68 percent) had more than an 85 degree hearing loss in the better ear. See Table X. Another 17 percent had no audiograms in their case records, which suggested that the counselors were confident that the hearing level of the clients was so low as to make an audiometric examination unneccessary. This was true for clients in each of the three cities.

The average age of onset of deafness was 3 years. See Table XI. No significant differences were found when the age of onset of deafness was examined between the passed and failed groups. No further analysis was done on this data. However, some of the means do appear quite large. For many in the D.C. group, it was discovered that early attempts had not been made to determine the hearing acuity of the clients as children, and as a result, age of onset might be more properly called "age hearing loss was diagnosed or discovered." For the Detroit group, however, the mean was raised because two of their clients became deaf after the age of 25. In order to determine if any benefit was gleaned from having other deaf relatives, we attempted to compare the test scores of those who had deaf relatives with the scores of persons who were the only member of the family who was deaf. However, this information was unavailable for study for most of the clients.

Types of Disabilities: What secondary disabilities were prevelant within the three groups?

The disabilities of the clients were grouped according to the classification used in the study. "A National Follow-up Study of Mental Retardates Employed by the Federal Government." The frequencies for these categories are listed in Table XII. Over 50 percent of the clients had no secondary disability. The largest single disability group had a cardiac or circulatory disability. Speech was indicated as the second disability only when speech difficulty was obviously not associated with deafness, i.e. laryngectomy, etc.

Passed-Failed Analysis of Test Results:

As data was gathered from the three areas, differences were noted in the number of those who passed and failed. A higher passed-failed ratio occurred in the Baltimore area (43.8 percent of the persons from D.C. passed as opposed to 59.8 percent from Baltimore). Even though the difference was not as great, Detroit also had a higher passed percentage–49 percent.

Differences were noted in the span of time devoted to training. Although the total number of hours spent in training was the same, Baltimore allotted two full days to the training (12 hours) while D.C. spread the 12 hours over six weeks. When there is an interest in learning a lot of information quickly, students will often "cram" for an examination. Providing they have effective study habits and the amount of information is not overwhelming, this procedure is very effective for a short time. However, students who are interested in learning something very well and remembering over a longer period of time, will divide the information to be learned and study parts of it at set intervals in time. Learning theorists call this mass vs. distributed practice. Each is effective depending on one's aim for studying in the first place. In as much as we have used the two practice effects, some of the differences between the three cities in the test results may be accounted for in this way. However, this should be considered in future planning for this type training.

In an effort to assure that no difference in the type of pre-examination instructions accounted for the differences in performance on the tests, the interpreter from Baltimore signed the instructions to D.C.'s second testing. Although the passed-failed ratio was higher on the second testing, (12.5 vs. 41.7 percent) four of the persons who had been tested in the previous testing did not improve their scores with this innovation. Thus, on the third testing, the instructor from the training class signed the instructions for the actual test. This time 47.8 percent passed, six of whom had taken the test before and two of

whom had passed during previous testings and wanted to improve their scores.

In discussions, it was learned that only those persons whose scores were near passing in Baltimore were encouraged to repeat the testing. Therefore, only seven out of 82 people were tested more than one time in Baltimore as opposed to 12 out of 48 in D.C. Detroit had only one special testing.

Since differences were observed in the percent passed and failed in the three cities, a separate analysis was made of the scores obtained by people in D.C., Baltimore, and Detroit on each part of the test. Tables XIII, XIV, and XV show the passed- failed breakdown for each city on all three parts of the tests. Some significant differences did show up. For people who passed in D.C. and Baltimore, there was no significant difference between the means for either part of the test. However, when comparing passing averages for D.C. and Baltimore, each, with Detroit, there was a significant difference on Part I. On Part II of the test, persons in Baltimore scored significantly higher than those in Detroit. However, no significant difference was observed between the means for groups from D.C. and Baltimore or D.C. and Detroit. In looking at the total scores, no significant differences were noted between the three cities.

The same is not true for the failed group. No significant differences were noted for Part I. The difference between means for groups from D.C. and Detroit was significant ($t=2.08$, $p>.05$) when comparing Part II of the test. An examination of means indicated that D.C. people among the failed group, scored much lower than Detroit people of the failed group. On the total score, significant differences were noted between groups from D.C. and Baltimore ($t=2.00$, $p .10$); D.C. and Detroit ($t=2.49$, $p>.01$). In each case the D.C. group scored well below the other two groups. This may have been due to the size of the sample, as D.C. had fewer participants than the other two cities. None of the available data explained this difference.

We had thought that information about the clients employment history might also account for some differences in test performance. However, many of the clients had never been employed, and the case records for a number of the clients did not contain information about their work experience.

[1]Oswald, Hedwig W. A National Follow-up Study of Mental Retardates Employed by the Federal Government: Final Report Research Grant 2425-G, Department of Vocational Rehabilitation. HEW in Press Oct., 1968.

[1]A 't' test is a statistic used to determine the significance of difference between two means.

TABLE I
AGE OF CLIENTS PARTICIPATING BY FREQUENCY AND PERCENT

Age	Frequency	Percent
19 - 23	46	28.8
24 - 28	24	15.0
29 - 33	10	6.2
34 - 38	20	12.5
39 - 43	19	11.8
44 - 48	18	11.3
49 - 53	15	9.4
54 - 58	4	2.5
59+	2	1.3

TABLE II
AVERAGE AGE OF THOSE TAKING POST OFFICE TEST

CITY		PASSED	FAILED	TOTAL
D.C.	N	13	23	36
	MN	25.40	31.39*	29.22
		6.38	10.86	
Baltimore	N	43	26	69
	MN	33.20	40.57	35.98
		10.91	9.89**	
Detroit	N	27	28	55
	MN	31.33	36.21(ns)	33.81
		11.66	11.09	
TOTAL	N	83	77	160
	MN	31.37	35.95(ns)	33.71
		23.75	21.61	

(NS)=Not Significant
*p>.05, t=2.08
**p<.01, t=2.90

TABLE III
NUMBER OF MEN & WOMEN TAKING EXAM

	BALTIMORE		DETROIT		D.C.		COMBINED	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent
MEN	25	36.23	11	20.00	13	36.11	49	30.62
WOMEN	44	63.76	44	80.00	23	63.64	111	69.37
TOTAL	69		55		36		160	

TABLE IV
PERCENTAGE OF MALES AND FEMALES PASSING OR FAILING EXAMINATION

	BALTIMORE		DETROIT		D.C.		COMBINED	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent
Males								
Pass	12	48.00	5	45.45	10	76.91	27	55.11
Fail	13	52.00	6	54.54	3	23.07	22	44.89
TOTAL	25		11		13		49	
Females								
Pass	31	70.45	22	50.00	3	13.04	56	50.45
Fail	13	29.54	22	50.00	20	86.95	55	49.54
TOTAL	44		44		23		111	

TABLE V.
PERCENTAGE OF WHITES VS. NON-WHITES TAKING THE EXAMINATION

	BALTIMORE		DETROIT		D.C.		COMBINED	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent
White	62	89.85	41	74.54	9	25.00	112	70.00
Non-White	5	7.24	13	23.81	26	72.22	44	27.50
Don't Know	2	2.89	1	1.65	1	2.74	4	2.50
TOTAL	69		55		36		160	

TABLE VI
PASS-FAIL RATIO OF WHITES TO NON-WHITES

	BALTIMORE		DETROIT		D.C.		COMBINED	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent
FAILED								
White	20	32.25	18	43.90	5	55.50	43	38.36
Non-White	5	100.00	9	62.23	17	65.38	31	70.45
Don't Know	1		1		1		3	
PASSED								
White	42	67.74	23	56.09	4	44.49	69	61.60
Non-White	0	0	4	30.76	9	34.61	13	29.54
Don't Know	1						1	

TABLE VII
HIGH SCHOOL STATUS FOR THOSE PASSING VS. FAILING
BY NUMBER AND PERCENT

	PASSED		FAILED		TOTAL	
	No.	Percent	No.	Percent	No.	Percent
Presently Enrolled	2	2.4	1	1.3	3	1.2
Graduated High School	54	65.0	33	42.8	87	54.3
Quit	3	3.6	7	9.1	10	6.2
Terminated (Age)	4	4.8	8	10.4	12	7.5
Terminated (Illness)	1	1.2	2	2.6	3	1.2
Don't Know	19	22.9	26	33.8	45	26.9
TOTAL	83		77		160	

TABLE VIII
MEAN TEST SCORES PASSED-FAILED: Graduated–Not Graduated

	PASSED	FAILED
Graduated		
Mn	134.55	68.24
SD	27.37	28.89
N	54	33
Did Not Graduate		
Mn	119.50	51.40
SD	20.60	18.78
N	12	20
	t=2.14*	t=3.16**

*p>.05
**p>.05

TABLE IX
AVERAGE READING LEVEL FOR THOSE PASSING VS. FAILING

	PASSED			FAILED		
	Mean	No.	SD	Mean	No.	SD
D.C.	7.2	9	3.7	4.0	15	3.4
Baltimore	7.19	26	3.0	6.31	19	3.4
Detroit	6.87	16	5.6	Can't Compute[1]	4	
TOTAL	7.09	51	5.6	5.29	38	4.8

[1](24) of 28 who failed lacked reading information.

TABLE X
DEGREE OF HEARING LOSS FOR THOSE PASSING VS. THOSE WHO FAILED IN PERCENTAGE

Hearing Loss (Decibe)	PASSED				FAILED			
	Baltimore	Detroit	D.C.	Combined Group	Baltimore	Detroit	D.C.	Combined Group
85 & Up	74.42	66.66	76.92	72.28	50.00	64.28	82.13	64.93
65 - 84	2.32	14.81	7.69	7.23	11.54	21.42		11.69
45 - 64		11.11		3.61	7.69	7.14		5.19
No Answer	23.23	7.40	15.30	16.87	30.77	7.14	17.34	18.18
TOTAL	43	27	13	83	26	28	23	77

TABLE XI
AVERAGE AGE OF ONSET OF DEAFNESS

	PASSED	FAILED	TOTAL
D.C.			
Mn	4.18	4.68	4.50
N	11	19	
Baltimore			
Mn	1.16	2.72	1.68
N	36	18	
Detroit			
Mn	5.8	2.26	4.06
N	26	26	
TOTAL			
Mn	3.33	3.12	3.21
N	72	63	135

TABLE XII
SECONDARY DISABILITY OF STUDY CLIENTS BY NUMBER

	D.C.	Baltimore	Detroit	TOTAL
Visual Impairment	2		4	6
Speech Impairment	1		1	2
Cerebral Palsey		1		1
Orthopedic Impairment	1	3		4
Cardiac and Circulatory	2	2	8	12
Respiratory		1	2	3
Emotional	1	1	2	3
Other	4	5	4	13
None	22	36	24	82
Don't Know	3	18	7	28
Combination		2	3	5
N	36	69	55	

TABLE XIII
AVERAGE SCORES ON PART I OF POST OFFICE EXAMINATION

	D.C.	Balti.	Detroit	"t" test DCD	"t" test B&D
Passed					
N	11	20	27	2.73*	3.62*
Mn	77.0	74.75	63.62		
SD	16.0	14.80	10.90		
Failed					
N	25	10	28	NS	NS
Mn	33.0	39.10	40.57		
SD	25.0	8.50	14.40		

[1]In Baltimore some of the part scores were unavailable, only the total score was given for some clients. Thus, the N for parts I and II are not the same as the total score.

TABLE XIV
AVERAGE TEST SCORES ON PART II OF POST OFFIC EXAMINATION

	D.C.	Balti.	Detroit	"t" test DCD	"t" test B&D
Passed					
N	11	20	27		
Mn	62.8	71.05	59.40	3.55	NS
SD	17.6	14.8	12.4		
Failed					
N	25	10	28		
Mn	16.12	21.6	24.67	NS	2.08*
SD	15.5	7.5	13.4		

**p≥.01
*p≥.05

TABLE XV
AVERAGE TEST TOTAL SCORES OF POST OFFICE EXAMINATION

	D.C.	Balti.	Detroit	"t" test DCD	"t" test B&D
Passed					
N		39			
Mn	139.81	133.35	123.03		
SD	30.3	24.7	20.9	NS	NS
Failed					
N		30			
Mn	49.00	61.76	65.28	2.00*	2.49*
SD	26.0	16.9	18.1		

**p≥.01 (in (passed analysis the "t" only approached significance
*p≥.10

CHAPTER V

PROJECT PLACEMENT ACTIVITIES

Prior to placement activites with individual clients, an attempt was made to make an analysis of employment opportunities available to the deaf in Federal agencies. A review was made of Federal Civil Service job announcements in order to identify job descriptions for which deaf persons could qualify. Personal contact was made by staff members with various government agencies in order to familiarize placement people with some of the difficulties experienced by the deaf in obtaining employment and to locate suitable employment opportunities within these agencies.

Applying for employment with the Federal Government involves several steps which may appear complex to anyone. However, because the process involves many activities that are highly verbal in nature the experience can prove especially frustrating to the deaf person of lower language skill. Members of the project staff became involved in the actual placement of deaf individuals in order to identify specific placement problem areas and to attempt to develop a job placement procedure which would help to overcome these difficulties.

The process of selective placement discussed below was found to be an effective means of reducing the difficulties encountered by deaf persons in obtaining employment at a level commensurate with their training and ability. The procedure involved the following steps:

Referral
Interpretation of job announcement
Review of employment application
Employer contact
Job interview
Follow-up

Referral

A project registration form was provided to local school and rehabilitation counselors who worked with the deaf, and they were requested to refer any client interested in participating in the project. They were requested to provide background information on the client's education, training and work

experience. When the purpose of the referral was for placement in Federal employment, an interview was scheduled with the client. Prior to the interview, the background information on the client was reviewed by a member of the project staff in order that arrangements could be made to obtain any information that was needed. During the period from July 1, 1967 to June 30, 1968, twenty-four persons were referred to the project for placement activities. Twelve of these were placed with federal agencies and twelve with private industry.

Interpretation of Job Announcement

During our initial interview with a client who was seeking placement assistance, the job announcement was reviewed in light of background information. This was done in order to make certain that the client correctly understood and met specific qualifications for a position for which he wished to apply.

Job announcements for the Federal Civil Service are often lengthy and may include several options at various levels. These announcements, written in "Federalese", often discourage deaf persons from competing for jobs which they are qualified, or, on the other hand, encourage unqualified persons to apply.

An effort was made to rework these announcements especially for the deaf, but this task proved overwhelming and ineffective. The personal interview to review job announcements proved to be a much more effective approach.

Review of Employemnt Application

An analysis was made by staff members of sixteen applications submitted by persons known to be trained specifically for a job which they were applying. This analysis revealed two areas of difficulty. For some the instructions for completing the application were too complex and highly verbal. Also, the deaf person's sparce written language at times lacked clarity and the application did not appropriately represent him to an employer who was unfamiliar with this aspect of the deaf person's communication problems.

Since the application for government employment is frequently the most significant factor on which a person's eligibility is based, we found that reviewing and rewriting the application was one of the most important placement activities.

Employer Contact

A personal contact with prospective employers by a staff member was found to be important before the client's job interview for the following reasons. Many persons are unaware of the vocational potentials of the deaf. Through personal contact with a prospective employer the communication problems and means of overcoming them were candidly discussed. This contact gave the staff member an opportunity to overcome problems that operational people and first line management envisioned in working with a person with communication difficulties. Concrete examples of deaf persons performing well in related work were used to overcome employer resistance to hiring the deaf. This contact was also important because it allowed arrangements to be made concerning the type of communication to be used during the job interview.

Job Interview

The purpose of the job interview was to enable the employer to evaluate the applicant in light of job demands and to allow the interviewee to evaluate the specific job opportunity in light of his interests, abilities, needs and career goals.

The interview situation was discussed with the client during the initial placement interview and with the employer at the time of employer contact. Both parties were advised that the services of an interpreter could be made available. However, the decision as to whether or not one would be used was made by both the client and employer.

We found that some employers felt a client was overly dependent when accompanied by an interpreter. Also, some clients felt the interpreter's presence interfered with their ability to project themselves during the interview. It was our experience that many interviews were most effective when the employer and prospective employee used the means of communication that they would ordinarily use in their working relationship.

Preparation for how one might make the best appearance and most effectively relate in a job interview was provided by the counseling staff.

Follow-up

We found it almost essential to offer follow-up services when

attempting to place the deaf, not only, to overcome employer resistance but also to enhance the clients opportunity for successful job adjustment.

During initial job orientation it was helpful for the counselor or placement person to introduce the new employee to co-workers and make himself available to answer questions the deaf person might have regarding the physical plant, employer benefits, time and attendance etc. At this time special arrangements were made by which a client could notify his employer when he would be late or absent.

Observations and Recommendations

Employer education was found to be an essential part of the placement process. Negative stereotypes do exist in the minds of some employers. For instance, some think muteness (often called dumbness) has reference to limited intellectual capacity and consequently they restrict their own thinking about job possibilities for the deaf. Some seemingly positive stereotypes also exist. For example, some employers view the deaf as dependable, stable workers who derive extended satisfaction from one level of employment. These same employers tend to think that the deaf are not interested in career opportunities which allow for greater development of potential. Through a program of employer education much can be done to reduce the impact of such stereotypes and thus allow individuals similar opportunities to those of hearing workers.

Although an interpreter need not be present for many job interviews, the availability of persons able to communicate with the deaf during the orientation procedure is a very important consideration to many employers. This is especially the case in large agencies and where the deaf person is the only deaf worker.

The greatest difficulty observed in placing deaf who had not attended and were not going to attend college and who had completed regular schooling was the danger of placing them in positions where there would be little opportunity to advance and develop individual potential. This is due to the fact that semi-skilled, skilled, and semi-professional training is inadequate for the deaf. It is hoped the National Technical Institute for the Deaf will do much to meet this great area of need.

CHAPTER VI

WORKSHOP ON INTERPRETER SERVICES

A workshop on interpreter services for the deaf in Civil Service employment was held at Gallaudet College, Washington, D.C. on June 10, 1967. This workshop was sponsored by the District of Columbia Department of Vocational Rehabilitation through its project for promoting Civil Service Employment of the deaf and in cooperation with the Civil Service Committee of the National Association of the Deaf. Participants included members of the deaf community, experts in education and vocational rehabilitation of the deaf and representatives from the U.S. Civil Service Commission. A summary of the purpose and findings of the workshop was prepared by the Editorial Committee for the conference and is presented below.

The world of work is a highly complex one characterized by frequent changes in methodology and technology and one in which interpersonal communications often influence personal job functioning. The deaf suffer in competition with hearing persons unless a means can be found to reduce this communication problem. To achieve this end, it has long been recognized by authorities concerned with the preparation of the deaf for employment and with the problems they encounter after going to work that interpreter services during these various employment phases can effectively improve their successful job performance.

With these basic needs identified, the conference was organized into four workshop sessions designed to pursue in depth the employment circumstances during which interpreter services for the deaf are required and can best be utilized. The workshop topics were concerned with interpreting needs when (1) applying the employment, (2) maintaining employment, (3) being oriented for a job, and (4) participating in discussions.

Some of the more relevant recommendations of the workshop are as follows:

1. Selective placement techniques were recommended for counselors working with deaf clients. In this process the counselor and client can realistically evaluate job demands and client qualifications. After this has been done, the initial contact with an employer can be made by the counselor who can inform the employer of the client's abilities and can explain the

communication level of the client. The counselor can then discuss with the client and employment interviewer the method of communication best suited for the interview. The decision regarding the use of an interpreter can then be based on these insights into the attitudes and needs of the individuals involved in a particular situation.

2. It was agreed that non-college trained deaf persons, because of their level of language sophistication, are likely to need the services of an interpreter during a job interview.

3. The deaf person, like all new employees, faces his new job with things to learn about his place of employment, the regimen of his work day, specific job duties and his peers. Therefore, interpreter services during job orientation can ease this period of intial job adjustment.

4. Interpreter services should be available so that deaf employees can participate in staff training sessions, re-training classes, professional meetings and similar activities planned for the purpose of updating or upgrading job qualifications.

5. The recommendation was made that when deaf persons take Civil Service examinations they should note their deafness on CSC application for employment Forms SF-171 or 5001. The purpose of this is to alert the test administrator that a communication problem exists and to seat the deaf in front seats.

6. Special Civil Service examination situations were recommended in order that instructions can be given in sign language to groups of deaf persons.

7. The maintenance of an on-going registry of interpreters was encouraged in order that referrals of competent interpreters would be available to agencies desiring their services. Along with this, it was recommended that an interpreter training program be established.

CHAPTER VII

SUMMARY

The purpose of this project was to investigate some of the difficulties the deaf have in obtaining employment, and to implement techniques to overcome some of these barriers, particularly in Civil Service.

Five populations were served. The first group consisted of 18 clients interested in obtaining employment in computer operations. The second group was set up to improve language skills. The third group was established to provide information concerning psychological services generally available to hearing people. A fourth group received placement services based upon counselor referrals. A fifth group was trained for taking the Post Office Clerk-Carrier Examination. Finally, in each of the groups mentioned above, interpreter services were offered in some cases, as an ancillary service.

The 18 clients who received training in computer operations were trained through a cooperative effort with rehabilitation agencies in several other states. Arrangements were made in the District of Columbia with a training agency to teach computer operation to a group of deaf clients. Since there was an insufficient number of potential participants known in D.C., other states were contacted and asked to recommend clients for this training. Upon completion of the training, the clients returned to their home states.

Most of these clients were recent graduates from high school, with little or no work experience. They were given sensitivity training in an effort to make them more self-aware and to help them appraise themselves more realistically. Many helpful insights were obtained by members of the group.

Adult education classes were offered for those persons who were already employed but needed help with language skills, in order to enhance their employment opportunity. There were courses in typing, drama, and English. The English class was divided into two parts, a combination of remedial grammar and literature made up one part and instruction in vocational language made up the other. Out of the latter evolved a training for the Post Office Clerk-Carrier Examination. Of the 36 people involved in the program in D.C., 13 passed the test. A similar training program was conducted in Baltimore and Detroit. Because of an apparent disparity in results between these jurisdictions, a follow-up study was made of the three populations.

An important part of the services offered was that of providing interpreters. Some employers were more willing to hire a deaf employee if they knew an interpreter would be made available during the orientation period.

BIBLIOGRAPHY

Altshuler, K.Z., Rainer, J.D. and Kallman, F.J.: Family and Mental Health Problems in a Deaf population. New York State Psychiatric Institute, New York, 1963.

Burchard, E.M.C. and Myklebust, H.A.: A comparison of congenital and adventitious deafness. Am. Ann. Deaf, 87: 140, 1942.

Craig, W.N. and Silver, N.H.: Examination of selected employment problems of the deaf. Am. Ann. Deaf 3:4, 1966.

Crammatte, A.B.: The Formidable Peak: A study of deaf people in professional employment. Gallaudet College, Washington, D.C., 1965.

Ewing, A.W.G. and Stanton, D.A.. A study of children with defective hearing.

Furth, Hans: Influence of language on the development of concept formation in deaf children. J. Abnorm. soc. Psychol., 63, 386-389 (a) 1961.

Thinking Without Language Psychological Implications of Deafness. Free Press, New York, 1966.

Justman, Joseph and Moskowitz, Sue: A follow-up study of graduates of the school for the deaf. Bureau of Educational Research and Statistics at the New York Board of Education, 1963.

Kronenberg, Henry H. and Blahe, Gray D. Young Deaf Adults: An Occupational Survey. Final Report. Demonstration Grant for Project No. RD-1652, Vocational Rehabilitation Administration, Department of Health, Education and Welfare, March, 1966.

Lenneberg, E.H.: Understanding language without the ability to speak: A case report. J. Abnorm. soc. Psychol. 65, 419-425, 1962.

Lerman, A.: Vocational Adjustment and the Deaf Alexander Graham Bell Association for the Deaf, Washington, D.C. 1965.

Lunde, A.S. and Bigman, S.K. Occupational Conditions Among the Deaf. Gallaudet College, Washington, D.C. 1959.

Ott, Joseph T. (ed). Proceedings of a National Workshop on Improved Vocational Opportunities for the Deaf. University of Tennessee, Knoxville, Tenn. 1964.

Quigley, S.P., Research on Some Behavioral Aspects of Deafness. Institute of Research on Exceptional Children, University of Illinois, 19.

Schein, J.D. The Deaf Community Study Vocational Rehabilitation Administration, Department of Health, Education, and Welfare, RD No. 734. Gallaudet College, Washington, D.C.

Schein, J.D. and Knuemann, C.H. Directory of Social Services for the Deaf of Metropolitan Washington, D.C., Research Grant No. 734, Gallaudet College, Washington, D.C. January, 1962.

Schlesinger, Hilda S. and Meadow, K.P. A Pilot Project to Develop Mental Health Services for the Deaf Community in the San Francisco Bay Area. Vocational Rehabilitation Administration, RD No. 24045.

Weckler, Norma and Craig, James H.: Sensitivity training in Human relations for deaf adults. The Deaf Amer. May, 1965.

APPENDIX

Appendix A

POST MEETING EVALUATION
SESSION NO. _____

1. How do I FEEL about this meeting? (circle one)

Lousy	Didn't like it	No feeling	I feel good	I feel very satisfied

2. Did I TALK more or less than the others in this meeting? (circle one)

Very little	Less than others	The same as others	More than others	Much more than others

3. How much did I TALK ABOUT MY true feelings? (circle one)

Not at all	Not much	A little bit	A lot	Very very much

4. What do I FEEL was the most important thing that was talked about at our meeting today?

5. What things do I feel were NOT GOOD about this meeting?

6. How could future meetings be IMPROVED or CHANGED and made better?

Part II Personal Information

7. Age of client as of December, 1968

_____ (years)

8. Sex of Client:

_____(1) Male
_____(2) Female

9. Marital Status of Client:

_____(1) Single
_____(2) Married
_____(3) Widowed
_____(4) Divorced
_____(5) Separated

10. Which is he?

_____(1) White
_____(2) Non-White

Part III Hearing and Communication

11. Degree of Hearing Loss

_____DB Better ear

12. Does client use a hearing aid?

_____(1) Yes
_____(2) No

13. At what age was the client's loss discovered? (Write "0" for congential deafness or age at which deafness was discovered)

_____(number)

14. What is the hearing acuity of client's family? (Check one on each line)

	(1) Deaf	(2) Hard of Hearing	(3) Hearing
_____a. Father	_____	_____	_____
_____b. Mother	_____	_____	_____
_____c. Spouse	_____	_____	_____
_____d. Siblings	_____	_____	_____
_____e. Children	_____	_____	_____

15. How does the counselor communicate with the client? (Check as many as apply)

_____(01) Talking and Lipreading
_____(02) Signing
_____(03) Fingerspelling
_____(04) Gestures
_____(05) Writing
_____(06) Other (specify)_____
_____(07) a+b+c
_____(08) b+d
_____(09) b+c+e
_____(10) a to e

16. Age at which client started school:

_____(years)

17. Age at which client's education was terminated:

_____(years)

18. How many years did client attend school in each of the following?

_____ a. Residential School for the Deaf
_____ b. Day School for the Deaf
_____ c. Public School - Special Classes
_____ d. Public School - Regular Classes
_____ e. Private School - Special Classes
_____ f. Private School - Regular Classes
_____ g. College

19. High School Status of client:

_____(1) Presently enrolled
_____(2) Graduated (or completed high school)
_____(3) Voluntarily quit
_____(4) Terminated because of age
_____ (5) Terminated because of illness
_____ (6) Terminated for reasons other than above.

Specify_____

_____

20. Upon completion of high school which kind of diploma or certificate did the client receive?

_____(1) Academic diploma
_____(2) Certificate of attendance
_____(3) Vocational Diploma
_____(4) None of these
_____(5) Other Specify_____

21. Describe any special training the client received beyond high school:

_____
_____
_____

22. If the client attended college, what kind of degree did he receive?

_____(1) He did not attend college
_____(2) Junior college certificate or equivalent
_____(3) BA or BS
_____(4) MA or MS
_____(5) Other Specify_____
_____(6) None

23. In which state did the client receive most of his elementary education?

_____(name of state)

24. In which state did the client receive most of his high school education?

_____(name of state)

Part IV Employment History

Fill in the following section for clients with employment history. If client has never been employed, check the following and skip to Item 30:

25. _____(He has never been employed).

Use the following codes where applicable for: (1) job classification, (2) length of employment, and (3) reason for termination of each of the client's employment experiences listed below:

Job Classification

(1) Professional Managerial Sales
(2) Skilled
(3) Semi-skilled worker
(4) Farm worker or laborer
(5) Unskilled worker
(6) Service
(7) Other, Specify_____
(8) I don't know

Length of Employment

(1) 00 to 3 months
(2) 3 months to 6 months
(3) 6 months to 1 year
(4) 1 year to 3 years
(5) Over 3 years
(6) I don't know

Reason for Termination of Employment

(1) To accept better job
(2) To attend school or training
(3) Quit
(4) Illness
(5) Discharged
(6) Temporary job expired
(7) Other
(8) I don't know

26. Client's job at the time he took the most current Post Office exam.

_____ (a) He was unemployed at that time.
_____ (b) The job was permanent and full-time
_____ (c) The job was permanent and part-time
_____ (d) The job was temporary and full-time
_____ (e) The job was temporary and part-time
_____ (f) Job classification
_____ (g) Length of employment

27. Client's first previous job exclusive of the one described in Item 26.

_____ (a) Job Classification
_____ (b) Length of employment
_____ (c) Reason for leaving (other, specify_____

_____

28. Client's second previous job

_____ (a) Job classification
_____ (b) Length of employment
_____ (c) Reason for leaving (other, specify_____

_____

29. Client's third previous job

_____ (a) Job classification
_____ (b) Lenght of employment
_____ (c) Reason for leaving (other, specify_____

_____

30. What other physical disabilities does the client have besides deafness which effect employment? (Check as many as apply)

_____ (01) Visual impairment
_____ (02) Speech impairment
_____ (03) Cerebral palsy

_____ (04) Orthopedic impairment
_____ (05) Cardiac or circulatory condition
_____ (06) Respiratory condition
_____ (07) Epilepsy
_____ (08) Emotional or personality disorder
_____ (09) Other, specify_____
_____ (10) None
_____ (11) Don't know

31. What is the client's reading grade level?
(Based on a standardized test or counselor evaluation)

_____ (01) Non-reader
_____ (02) First grade
_____ (03) Second grade
_____ (04) Third grade
_____ (05) Fourth grade
_____ (06) Fifth grade
_____ (07) Sixth grade
_____ (08) Seventh grade
_____ (09) Eight grade
_____ (10) Ninth grade or higher
_____ (11) Don't know

32. List Post Office test scores for <u>first</u> testing

_____ (a) Part I
_____ (b) Part II
_____ (c) Total

33. List Post Office test scores for <u>second</u> testing

_____ (a) Part I
_____ (b) Part II
_____ (c) Total

34. List Post Office test scores for <u>third</u> testing

_____ (a) Part I
_____ (b) Part II
_____ (c) Total

Appendix B

AN INVESTIGATION OF DEAF PERSONS
TAKING THE CIVIL SERVICE POST OFFICE
CLERK-CARRIER EXAMINATION

Conducted by the Department of Vocational
Rehabilitation Government of the
District of Columbia

Questionnaire

_____Client ID Number

____/____/_____Date of birth of client

Part I General Information

1. Has the client passed the Post Office Clerk-Carrier Examination?
   _____ (1) Yes
   _____ (2) No

2. How many times has this client taken the Post Office Clerk-Carrier Examination? (Not necessarily a special testing situation.)
   _____ (number)

3. How many times did the client take the pre-test training course for Post Office Clerk-Carrier Examination?
   _____(number)

4. Total number of hours the client spent in taking the pre-test training course:
   _____hours.

5. On what dates did the client take the test? (Check all that apply)
   _____(1) March, 1967
   _____(2) July, 1967
   _____(3) Nov., 1967
   _____(4) March, 1968
   _____(5) June, 1968
   _____(6) July, 1968
   _____(7) April, 1968
   _____(8) Dec., 1968

6. The number of times the client took the special test:
   (Total of check marks in Item 5)
   _____(number)

APPENDIX C

SAMPLE OF RESPONSES TO SELECTED QUESTIONNAIRE ITEMS DISTRIBUTED TO GEOGRAPHIC AREAS

MARITAL STATUS	D.C.	Balti.	Detroit
Don't know		2	1
Single	23	19	25
Married	10	42	22
Widowed		1	
Divorced		2	4
Separated	3	3	3

HEARING ABILITY–FATHER			
Deaf		2	1
Hard of hearing		1	
Hearing	12	15	10
Don't know	13	41	44

HEARING ABILITY–MOTHER			
Deaf		2	2
Hard of Hearing			
Hearing	23	26	10
Don't know	13	41	43

HEARING ABILITY–SIBLINGS			
Does not apply	5	5	2
Deaf	2	6	4
Hard of hearing	1	1	1
Hearing	17	16	7
Don't know	11	41	40

YEARS IN RESIDENTIAL SCHOOL			
Does not apply	12	9	23
1-5	1	2	
6-10	3	15	5
11-15	15	30	
16-21			1
22 and above			16
Don't know	7	13	10

YEARS IN DAY SCHOOL			
Does not apply	19	41	3
1-5			2
6-10	5		6
11-15	6	1	6
16-21			1
Don't know	6	27	10

YEARS IN PUBLIC SCHOOL (Special Class)			
Does not apply	27	36	40
1-5	1	2	2
6-10		5	
11-15	1	3	1
Don't know	7	23	12
YEARS IN PUBLIC SCHOOL (Regular Class)			
Does not apply	24	39	25
1-5		1	3
6-10	2	2	2
11-15	1	1	14
16-21	1		
Don't know	8	26	10
YEARS IN PRIVATE SCHOOL (Special Class)			
Does not apply	27	41	42
1-5	1	1	1
6-10	1	1	
Don't know	7	26	12
YEARS IN PRIVATE SCHOOL (Regular Class)			
Does not apply	28	42	42
6-10			1
Does not know	8	27	12
YEARS IN COLLEGE			
Does not apply	30	54	48
1	2	3	4
2			1
3	1		
4	1		1
5			1
Don't know	2	12	1
HIGH SCHOOL DIPLOMA			
Academic diploma	5	12	14
Certificate	11	11	1
Vocational diploma	2	4	3
None	6	15	19
Other		1	1

COLLEGE DEGREE			
Don't know	2	12	1
Didn't attend	30	54	48
Bachelor of Art	1		2
Master of Art			
College Prep.			1
None	3	3	3
PRESENT JOB CLASSIFICATION			
Does not apply	18	65	47
Professional	1		
Skilled	3	3	1
Semi-skilled	1	6	1
Farm or laborer	1		
Unskilled	1	1	1
Service	7	2	3
Clerical	1		
Don't know	2	1	2
JOB CLASSIFICATION OF PRIOR JOB			
Does not apply	12	29	19
Professional			1
Skilled	4	5	5
Semi-skilled		6	5
Farm or laborer	3	9	9
Unskilled	14	12	7
Clerical	3	5	5
Don't know		3	3